SB3020FCT~SB30100FCT

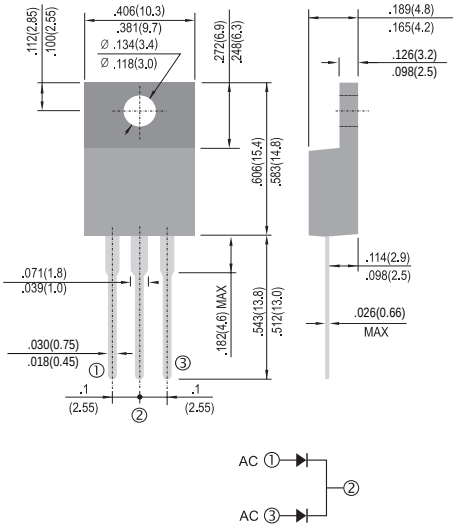
ISOLATION SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volts CURRENT 30.0 Amperes

Green

ITO-220AB

Unit: inch (mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forwrd voltge, high current capability
- High surge capacity.
- For use in low voltage,high frequency inverters free wheeling , and polarlity protection applications.
- Pb free product : 99% Sn above can meet RoHS environment substance directive request

MECHANICALDATA

Case: ITO-220AB Molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: As marked.

Standard packaging: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SB3020FCT	SB3030FCT	SB3040FCT	SB3045FCT	SB3050FCT	SB3060FCT	SB3080FCT	SB30100FCT	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	V
Maximum Average Forward Current	$I_{F(AV)}$	30								A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	275								A
Maximum Forward Voltage at 15A, per leg	V_F	0.55				0.70		0.85		V
Maximum DC Reverse Current T_c=25 °C at Rated DC Blocking Voltage T_A=100°C	I_R	1.0 100								mA
Typical Thermal Resistance	$R_{\theta JC}$	1.5								°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-50 TO + 125								°C

NOTES:

Both Bonding and Chip structure are available.

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RATING AND CHARACTERISTIC CURVES

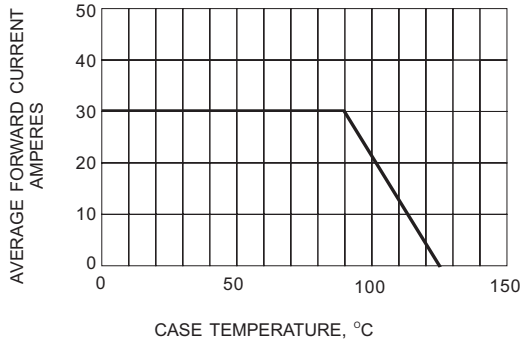

Fig.1- FORWARD CURRENT DERATING CURVE

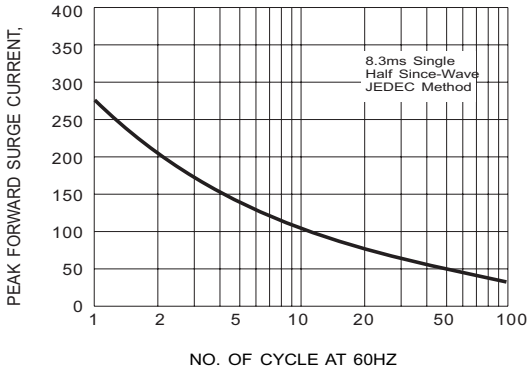

Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

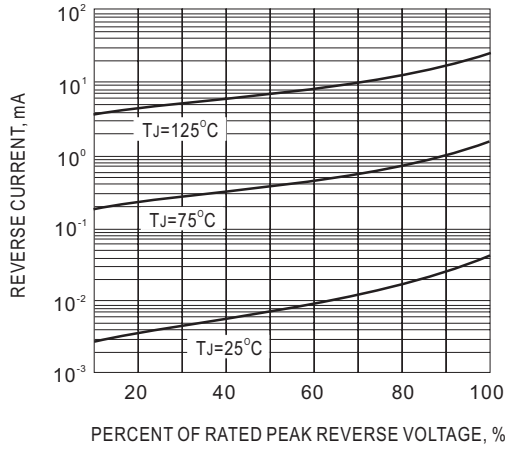

Fig.3- TYPICAL REVERSE CHARACTERISTICS

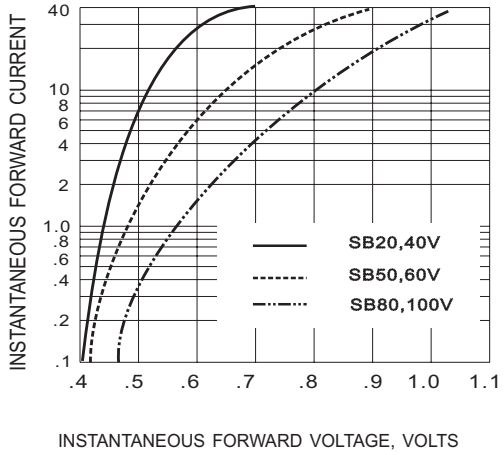

Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS